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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/609,017

Filing Date: June 30, 2000 Appellant(s): WALKER ET AL. MAILED

SEP 2 2 2004

GROUP 3600

Michael Downs For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 06/14/2004

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 3-14, 26-29 and 34-51 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

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(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,950,632	Reber et al.	9-1999
5,757,271	Andrews	5-1998
6,151,586	Brown	11-2000
5,722,418	Bro	3-1998
6,375,038	Daansen et al.	4-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Upon reconsideration, Claim Rejections under 35 USC § 112 in respect to claims

26-29 and 36-38 have been withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-14, 34-35 and 39-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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As per claims 3-14, 34-35 and 39-51, they are confusing, because the scope of the claims is not clear.

Claim 3-14. The method step "receiving a signal" is not descriptive. It is not clear what does the term "signal" encompass: sound, color, physical action, voltage or current value, or combination thereof. Furthermore, neither signal-producing means, no signal-receiving means are indicated, therefore it is not clear what method step does the term "receiving" imply.

The method step "determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal" is confusing, because it is not clear what method steps does the term "determining" contemplate. Furthermore, the use of the terms "a first container for storing a first medicine" and "a second container for storing a second medicine" is confusing, because these terms (structural elements) were not defined prior to said method step. As per term "signal" see discussion above.

Claims 34-35. The method step "determining a level to which a party complied with a medicine schedule based on the information" is confusing, because it is not indicated if the party took this medicine. Specifically, it is not clear how the first method step of "receiving information about weather said first container was able to communicate with said second container" is relating to the second method step of: "determining a level to which the party complied with a medicine schedule".

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Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 3-14, 34-35 and 39-51 are rejected under 35 U.S.C. 101 because the claimed method for rewarding a party does not recite a limitation in the technological arts. The independently claimed steps of: receiving information; determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container; determining a level to which the party complied with a medicine schedule; and rewarding the party, are abstract ideas which can be performed mentally without interaction of a physical structure.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

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Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

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In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

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The claims of the present application are distinguished from the claims analyzed in the decisions of *State Street, Alappat, Arrhythmia* and *AT&T*, where the claims in these cases clearly involved the use of technology as shown below.

State Street: The claims were in means plus function form and directed to a data processing system for managing a financial services configuration of a portfolio established as a partnership; the claims included limitations of a computer processor means for processing data, a storage means for storing data on a storage medium along with first through fifth means for processing different types of financial data. As such, the claims analyzed in *State Street* clearly involved the technological arts and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

AT&T Corp: The claims were directed to a method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber comprising generating a message record for an interexchange call between an originating subscriber and a terminating subscriber, and including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers. In considering these claims, it is clear that technology is being used to "automatically route" calls over the facilities of interexchange carriers and generating a message record for the call. Furthermore, the courts, in analyzing these claims, clearly indicated that they recognized the claims require the use of switches and computers. See AT&T Corp. v. Excel Communications Inc., 50 USPQ2d at 1450 (Fed. Cir. 1999). The court further noted that AT&T's claimed process employs subscriber's and call recipients' PICs as data, applies Boolean algebra to those data to determine the value of the PIC indicator, and applies that value through

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switching and recording mechanisms to create a signal useful for billing purposes. See AT&T Corp. v. Excel Communications Inc., 50 USPQ2d at 1453 (Fed. Cir. 1999). As such, the claims analyzed in AT&T clearly involved the technological arts as recognized by the court and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

Alappat: The claims were directed to a rasterizer for converting vector list data representing sample magnitudes of an input waveform into anti-aliased pixel illumination intensity data to be displayed on a display means comprising various means for determining distances and means for outputting illumination intensity data. Alappat's invention related generally to a means for creating a smooth waveform display in a digital oscilloscope and as indicated by the court, Alappat's invention is an improvement in an oscilloscope comparable to a TV having a clearer picture. The court reasoned that invention was statutory because the claimed invention was directed to a "machine". See *In re Alappat*, 31 USPQ2d at 1552-54 (Fed. Cir. 1994). Furthermore, in the decision of *AT&T Corp.*, the courts recognized that the claims in Alappat were for a machine that achieved certain results. See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 50 USPQ2d at 1452 (CAFC 1999). Once again, these claims clearly involve the technological arts as recognized by the court and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

Arrhythmia: The claims were directed to a method for analyzing electrocardiograph signals to determine the presence or absence of a predetermined level of high frequency energy in the late QRS signal including the step of converting a series of QRS signals to time segments, each segment having a digital value equivalent to the analog value of said signals at said time. In considering these claims, it is clear that technology is being used to convert a series of QRS signals to time segments having a digital value. Once again, these claims clearly involve the technological arts since one could not convert a signal to a time segment having a digital value without the

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aid of a computer or some processing device and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

Contrary to the claims in the above-cited cases, in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The claims are no more than a suggested idea that somebody can be benefited if he/she notices some changes in an environment. The claims are completely devoid of any means to carry out a process implementing the idea of "receiving a signal", "determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container", "determining a level to which a party complied", or "rewarding a party".

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-14, 26-27 and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reber et al. (US 5,950,632) in view of Andrews (US 5,757,271).

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As per claims 3-5, 11 and 26, Reber et al. teach a system and method for medical communication apparatus, comprising:

- receiving the signal from a device that monitors whether the first container and the second container are positioned so as to wirelessly communicate (column 2, line 66 – column 3, line 8; column 6, lines 23-35).

However, Reber et al. do not teach that the first container wirelessly communicates with the second container.

Andrews teaches a system and method for providing security for an electronic device wherein a first portable security device wirelessly communicates with a second portable security device to determine whether or not the second security device is within a selected proximity of the first security device (Abstract; column 1, lines 52-61).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Reber et al. to include determining whether the first container wirelessly communicates with the second container, as disclosed in Andrews, because it would advantageously enhance the security of the system by indicating that a security violation has occurred if the second container is not within the selected proximity of the first container (See: Andrews; column 1, lines 55-58); and increase accuracy of determining compliance of the patients with the prescribed schedule of taking medicine.

As per claim 6, Reber et al. teach said system and method wherein receiving the signal from a device that monitors whether the first container and the second container are positioned so as to wirelessly communicate comprises polling the device (column 3, lines 9-34; column 7, lines 55-59; column 10, lines 47-48).

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As per claim 7, Reber et al. teach said system and method wherein receiving a signal comprises receiving a signal from at least one of a representative of a pharmacy, a representative of a medical facility and a party that is to take at least one of the first and the second medicines (column 3, lines 9-25; column 7, line 60 - column 10, line 54).

As per claim 8-10, Reber et al. teach said system and method wherein receiving a signal comprises receiving an encrypted code (column 4, lines 23-26; column 7, lines 11-42; column 9, lines 54-65).

As per claims 12, 27 and 39-40, Reber et al. teach said system and method, comprising determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal (column 8, lines 55-62).

As per claims 13 and 41–42, Reber et al. teach said system and method wherein determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal comprises:

- receiving first information regarding a prescribed schedule for taking the first medicine and the second medicine (column 9, line 51 column 10, line 54);
- receiving second information regarding a schedule for taking the first medicine and the second medicine adhered to by the at least one party (column 9, line 51 column 10, line 54);
- comparing the first information to the second information (column 9, line 51 column 10, line 54);
- generating at least an indicator of a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine (column 9, line 51 column 10, line 54).

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As per claim 14, Reber et al. teach said system and method wherein obtaining first information regarding the first medicine and the second medicine comprises obtaining the first information from at least one of a representative of a pharmacy, a representative of a medical facility and a representative of a manufacturer of at least one of the first and the second medicines (column 3, lines 9-25, column 7, line 60 - column 10, line 54).

Claims 28-29, 34-38 and 43-44, 46-48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reber et al. in view of Andrews and further in view of Brown (US 6,151,586).

As per claims 28-29, 34-36, 38, 43-44, 47 and 51, Reber et al. teaches said system and method, comprising: receiving the signal from a device that monitors whether the first container and the second container are positioned so as to wirelessly communicate (column 2, line 66 – column 3, line 8; column 6, lines 23 - 35).

However, Reber et al. do not teach that the first container wirelessly communicates with the second container. Also, Reber et al. do not teach receiving the data output by the compliance monitoring device; and reward at least one party based on the received data.

Andrews teaches a system and method for providing security for an electronic device wherein a first portable security device wirelessly communicates with a second portable security device to determine whether or not the second security device is within a selected proximity of the first security device (column 1, lines 52-61).

Brown teaches a computerized reward system and method for encouraging in a health management program, comprising a server configured for receiving the compliance data and rewarding means, wherein compliance data on individuals is

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evaluated, and a reward to be given to the compliant individual (column 3, lines 18-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Reber et al. to include determining whether the first container wirelessly communicates with the second container, as disclosed in Andrews, because it would advantageously enhance the security of the system by indicating that a security violation has occurred if the second container is not within the selected proximity of the first container (See: Andrews; column 1, lines 55-58); and increase accuracy of determining compliance of the patients with the prescribed schedule of taking medicine. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Reber et al. in view of Andrews to include a server configured to receive the data output by the compliance monitoring device, and rewarding means for rewarding a party based on the compliance data, as disclosed in Brown, because it would advantageously enhance the capability of the system by stimulating patients to comply with health management program, thereby allowing physicians to determine the best way of treatment for the patients more accurately.

As per claim 37, Brown teaches said system and method wherein the reward comprises a discount on a product (column 23, lines 46-57). The motivation to combine Reber et al. in view of Andrews and further in view of Brown would be to stimulate patients to comply with health management program, thereby allowing physicians to determine the best way of treatment for the patients more accurately.

As per claim 46, Reber et al. in view of Andrews and further in view of Brown disclose all the limitations of claim 46, except that rewarding for complying with the schedule comprises providing the at least one party with a reward selected by at least one of a representative of an insurance company and a representative of a medical facility.

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However, the specification is silent regarding advantages of the indicated features over the prior art. Without such indication, it appears that modifying Reber et al. in view of Andrews and further in view of Brown to include selecting a reward by a third party would have been an obvious matter of business choice.

As per claim 48, Reber et al. in view of Andrews teach determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal (Reber et al. column 7, line 60 through column 10, line 54), wherein said received signal being indicative of a predetermined distance between the first container and the second container (Andrews; column 1, lines 52-61). Reber et al. in view of Andrews do not teach rewarding a party based on the compliance data, wherein rewarding comprises providing a first reward based on a distance between the first container and the second container, and providing a second reward based on at least one other indicator that the at least one party has complied with the schedule for taking the first medicine and the second medicine.

Brown teaches a computerized reward system and method for encouraging in a health management program, comprising a server for receiving the compliance data and rewarding means, wherein compliance data on individuals is evaluated, and a reward to be given to the compliant individual (column 3, lines 18-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Reber et al. in view of Andrews to include rewarding a party based on the compliance data, as disclosed in Brown, wherein rewarding comprises providing a first reward based on a distance between the first container and the second container, and providing a second reward based on at least one other indicator that the at least one party has complied with the schedule for taking the first medicine and the second medicine, because it would advantageously stimulate and

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discipline patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the patients more accurately.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reber et al. in view of Andrews, further in view of Brown and further in view of Bro (US 5,722,418).

As per claim 45, Reber et al. in view of Andrews and further in view of Brown teach all the limitation of claim 45, except providing the at least one party with a list of rewards; receiving a selection of one of the listed rewards; and providing the selected reward to the at least one party.

Bro teaches a system and method for mediating social and behavioral processes in medicine wherein a patient is presented with a list of rewards for his behavior, and wherein the patient indicates rewards he would receive (column 41, lines 3-33).

It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Reber et al. in view of Andrews and further in view of Brown to include providing the at least one party with a list of rewards, as disclosed in Bro, because it would advantageously stimulate patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the patients more accurately.

Claims 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reber et al. in view of Andrews, further in view of Brown and further in view of Daansen et al. (US 6,375,038).

As per claims 49 and 50, Reber et al. in view of Andrews and further in view of Brown teach all the limitations of claims 49 and 50, except penalizing the at least one party if the at least one party has not complied with the schedule.

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Daansen et al. (hereinafter Daansen) teach a system and method for promoting compliance with proper washing techniques, wherein employers may be fined if employees do not comply with Food Code regulations (column 1, line 54 through column 2, line 16).

It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Reber et al. in view of Andrews and further in view of Brown to include penalizing a party or charging the party for at least the portion of a treatment if the party has not complied with the schedule, as disclosed in Daansen, because it would advantageously discipline patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the patients more accurately.

(11) Response to Argument

<u>GROUP I</u>

Claims 3 and 7-11.

Claim Rejections - 35 USC § 101

In response to the applicant's argument that Claim Rejections under 35 USC § 101 is improper, the Examiner maintains that Claims 3 and 7-11 are rejected under 35 U.S.C. 101 because the claimed method does not recite a limitation in the technological arts. The independently claimed steps of: receiving a signal; and determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at lest in part on the signal are abstract ideas which can be performed mentally without interaction of a physical structure.

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As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). See also MPEP 2106 II A which states that only when the claim is devoid of any limitation to a practical application "in the technological arts" should it be rejected under 35 U.S.C. 101. Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

The "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using

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the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §\$102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the

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presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test.

In the decision of AT&T Corp. v. Excel Communications Inc., 50 USPQ2d 1447, 1449-50 (Fed. Cir. 1999), it was recognized that not everything is statutory subject matter. The court noted that a mathematical algorithm or abstract idea is directed to non-statutory subject matter unless applied in a useful way or otherwise reduced to some type of practical application. The analysis in the AT&T Corp decision focused on whether or not the claimed mathematical algorithm was used to produce a useful, concrete and tangible result. AT&T's claimed process employs subscribers' and call recipients' primary interexchange carrier (PIC) indicator as data, applies Boolean algebra to those data to determine the value of the PIC indicator, and applies that value through switching and recording mechanisms to create a signal useful for billing purposes. The court noted that PIC indicator represents information about the call recipient's PIC, a useful, non-abstract result that facilitates differential billing of longdistance calls made by an IXCs subscriber, and therefore, found the claimed process to comfortably fall within the scope of Section 101. AT&T Corp., 50 USPQ2d 1453. Again, AT&T Corp. never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the court in AT&T Corp. recognized that the claims require the use of switches and computers. In AT&T Corp, the decisions of In re Alappat, 33 F.3d 1526, 31 USPQ2d 1545 (Fed. Cir. 1994) and Arrhythmia Research Tech. Inc. v. Corazonix Corp., 958 F.2d 1053, 1060, 22 USPQ2d 1033,1039 (Fed. Cir. 1992) were also cited. In Alappat it was held that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete and tangible result of a smooth waveform display. In Alappat, the claimed invention was for a machine that achieved

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certain results and was therefore, already considered to involve the technological arts. In *Arrhythmia*, the court reasoned that the method claims qualified as statutory subject matter by noting that the steps transformed physical, electrical signals from one form into another form – a number representing a signal related to the patient's heart activity, a non-abstract output.

This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

The claims of the present application are distinguished from the claims analyzed in the decisions of *State Street, Alappat, Arrhythmia* and *AT&T*, where the claims in these cases clearly involved the use of technology as shown below.

State Street: The claims were in means plus function form and directed to a data processing system for managing a financial services configuration of a portfolio established as a partnership; the claims included limitations of a computer processor means for processing data, a storage means for storing data on a storage medium along with first through fifth means for processing different types of financial data. As such, the claims analyzed in *State Street* clearly involved the technological arts and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

AT&T Corp: The claims were directed to a method for use in a telecommunications system in which interexchange calls initiated by each subscriber are <u>automatically</u> routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber comprising generating a <u>message record</u> for an interexchange call between an originating subscriber and a terminating subscriber, and including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the

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interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers. In considering these claims, it is clear that technology is being used to "automatically route" calls over the facilities of interexchange carriers and generating a message record for the call. Furthermore, the courts, in analyzing these claims, clearly indicated that they recognized the claims require the use of switches and computers. See AT&T Corp. v. Excel Communications Inc., 50 USPQ2d at 1450 (Fed. Cir. 1999). The court further noted that AT&T's claimed process employs subscriber's and call recipients' PICs as data, applies Boolean algebra to those data to determine the value of the PIC indicator, and applies that value through switching and recording mechanisms to create a signal useful for billing purposes. See AT&T Corp. v. Excel Communications Inc., 50 USPQ2d at 1453 (Fed. Cir. 1999). As such, the claims analyzed in AT&T clearly involved the technological arts as recognized by the court and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

Alappat: The claims were directed to a rasterizer for converting vector list data representing sample magnitudes of an input waveform into anti-aliased pixel illumination intensity data to be displayed on a display means comprising various means for determining distances and means for outputting illumination intensity data. Alappat's invention related generally to a means for creating a smooth waveform display in a digital oscilloscope and as indicated by the court, Alappat's invention is an improvement in an oscilloscope comparable to a TV having a clearer picture. The court reasoned that invention was statutory because the claimed invention was directed to a "machine". See *In re Alappat*, 31 USPQ2d at 1552-54 (Fed. Cir. 1994). Furthermore, in the decision of *AT&T Corp*., the courts recognized that the claims in Alappat were for a machine that achieved certain results. See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 50 USPQ2d at 1452 (CAFC 1999). Once again, these claims clearly involve the technological arts as recognized by the court and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

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Arrhythmia: The claims were directed to a method for analyzing electrocardiograph signals to determine the presence or absence of a predetermined level of high frequency energy in the late QRS signal including the step of converting a series of QRS signals to time segments, each segment having a digital value equivalent to the analog value of said signals at said time. In considering these claims, it is clear that technology is being used to convert a series of QRS signals to time segments having a digital value. Once again, these claims clearly involve the technological arts since one could not convert a signal to a time segment having a digital value without the aid of a computer or some processing device and, therefore, whether or not the claimed invention involved the technological arts was not an issue.

Contrary to the claims in the above-cited cases, in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The claims are no more than a suggested idea that a person can come to the conclusion that two wireless communicating devices are apparently positioned within their respective communication range, upon noticing (by the person) some changes in an environment. The claims are completely devoid of any means to carry out a process implementing the idea of receiving a signal; and determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container.

Furthermore, the claims do not even recite "providing a first and a second containers" step. There are absolutely no limitations included in the independent claim that would at least suggest use of technology for implementing "receiving" or "determining" steps, for example a data processing device or any communication means. The claims do not include limitations that would suggest that a computer is being used to transform the data from one form to another, that would place the invention in the technological arts. Even disregarding the fact that there is no computer claimed that would physically transform the data, there does not appear to be any

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physical transformation of data. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As a result, the above-cited limitation may be viewed, for example, as nothing more than simply observing an environment, and making a decision about something based at least in part of said observation.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter.

Claim Rejections - 35 USC § 112

In response to the applicant's argument that Claim Rejections under 35 USC § 112 (P2) is improper, the Examiner maintains that method steps recited in the independent claim are confusing and not descriptive.

First, the Applicant indicates that there are two steps in the claim, but fails to show how the steps are related with each other.

Second, the method step *receiving a signal* is confusing because it is not clear what does the term "signal" encompass: sound, color, physical action, voltage or current value, or combination thereof. Furthermore, neither signal-producing means, no signal-receiving means are indicated, therefore it is not clear to what field of technology said method step belongs, and, accordingly, what type of signal is received, and how exactly said *receiving* step is implemented.

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Third, the method step **determining** whether a first container for storing a first medicine **was** positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal is confusing, because it is not clear what method steps does the term "determining" contemplate.

Use of the terms "a first container for storing a first medicine" and "a second container for storing a second medicine" is confusing, because these terms (structural elements) were not defined prior to said method step.

Furthermore, the first method step (*receiving a signal*) indicates that the method step is conducted in the present tense, while the second method step indicates action taken in the **past tense** (*was positioned*). It is not clear how the continuity of the method in time is preserved.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach determining whether a first container ... was positioned so as to wirelessly communicate with a second container..., it is noted that Reber et al. (hereinafter Reber) teaches a system and method for medical communication apparatus, comprising: receiving the signal from a device that monitors whether the first container and the second container are positioned so as to wirelessly communicate (C. 2, L. 66 – C. 3, L. 8; C. 6, L. 23-35). Each container for storing medicine, disclosed in Reber, is equipped with a communication circuitry, and is configured to send and receive a "signal". Reber does not specifically teach that said containers wirelessly communicate with each other.

Andrews was applied to show wireless communication between two portable security devices. Furthermore, Andrews discloses the step of determining

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whether or not the second portable security device is within a selected proximity of the first portable security device (C. 1, C. 52-61).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Reber and Andrews relate to field of wireless communication of data between portable devices. The security feature disclosed in Andrews, would benefit a communication system dealing with health-related issues, disclosed in Reber, by indicating that a security violation has occurred if the second container is not within the selected proximity of the first container (See: Andrews; C. 1, L. 55-58).

In response to applicant's argument that Andrews is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Reber and Andrews relate to a field of wireless communication of data between portable devices, wherein each portable device is provided with receiving and transmitting circuitry; includes a display and sound producing means for visual or audible indication in response to receiving a signal (Reber; C. 3, L. 3-8; Andrews; C. 4, L. 31-40).

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GROUP II Claims 4-6.

Claim Rejections - 35 USC § 101

In response to the applicant's argument that Claim Rejections under 35 USC § 101 is improper, the Examiner maintains that Claim 3 and claims dependent on claim 3 are rejected under 35 U.S.C. 101 because the claimed method does not recite a limitation in the technological arts. The independently claimed steps of: receiving a signal; and determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at lest in part on the signal are abstract ideas which can be performed mentally without interaction of a physical structure.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter (See reasoning for Claim Rejections under 35 USC § 101 for Group I). Claims 4-6 depend on claim 3. Accordingly, reasoning for Claim Rejections under 35 USC § 101 applied to claim 3 are equally applicable to claims 4-6.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach a device that monitors at least an indicator of whether the first container ... was positioned so as to wirelessly communicate with a second container..., it is noted that Andrews was applied to show the step of determining whether or not the second portable security device is within a selected proximity of the first portable security device (C. 1, C. 52-61). Furthermore, Andrews discloses a first portable security device includes a display and

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sound producing means for visual or audible indication in response to receiving a signal form a second portable security device, thereby obviously indicating "monitoring" feature (Reber; C. 3, L. 3-8; Andrews; C. 4, L. 31-40).

GROUP III Claims 12-14.

Claim Rejections - 35 USC § 101

In response to the applicant's argument that Claim Rejections under 35 USC § 101 is improper, the Examiner maintains that Claim 3 and claims dependent on claim 3 are rejected under 35 U.S.C. 101 because the claimed method does not recite a limitation in the technological arts. The independently claimed steps of: receiving a signal; and determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at lest in part on the signal are abstract ideas which can be performed mentally without interaction of a physical structure.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter (See reasoning for Claim Rejections under 35 USC § 101 for Group I). Claims 12-14 depend on claim 3. Accordingly, reasoning for Claim Rejections under 35 USC § 101 applied to claim 3 are equally applicable to claims 12-14.

Claim Rejections - 35 USC § 112

In response to the applicant's argument that Claim Rejections under 35 USC § 112 (P2) is improper, it is noted that claims 12-14 depend on claim 3. Accordingly,

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reasoning for Claim Rejections under 35 USC § 112 (P2) applied to claim 3 are equally applicable to claims 12-14.

GROUP IV Claims 34 and 35.

Claim Rejections - 35 USC § 101

Claims 34 and 35 are rejected under 35 U.S.C. 101 because the claimed method for rewarding a party for complying with a medicine schedule does not recite a limitation in the technological arts. The independently claimed steps of: receiving information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period; determining a level to which the party complied with a medicine schedule based on the information; and rewarding the party based on the level, are abstract ideas which can be performed mentally without interaction of a physical structure.

Contrary to the claims in the **State Street; AT&T Corp; Alappat**; **Arrhythmia** cases (see analysis of this cases in reasoning for GROUP I), in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The claims are no more than a suggested idea that somebody can be benefited if he/she notices some changes in an environment. The claims are completely devoid of any means to carry out a process implementing the idea of "receiving information...", "determining a level to which the party complied...", or "rewarding the party".

Furthermore, the claims do not even recite "providing at least one first and at least one second containers" step. There are absolutely no limitations included in the independent claim that would at least suggest use of technology for implementing

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"receiving" or "determining" steps, for example a data processing device or any communication means. The claims do not include limitations that would suggest that a computer is being used to transform the data from one form to another that would place the invention in the technological arts. Even disregarding the fact that there is no computer claimed that would physically transform the data, there does not appear to be any physical transformation of data. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As a result, the above-cited limitation may be viewed, for example, as nothing more than simply observing an environment; making a decision about something based on said observation, and paying somebody based on said decision.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter.

Claim Rejections - 35 USC § 112

In response to the applicant's argument that Claim Rejections under 35 USC § 112 (P2) is improper, the Examiner stipulates that method steps recited in the independent claim are confusing and not descriptive.

First, the Applicant indicates that there are three steps in the claim, but fails to show how the steps are related with each other. For example, the relationship between the step of: receiving information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period; and the step of:

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determining a level to which the party complied with a medicine schedule based on the information, is not clear. Specifically, it is not clear how ability of containers to communicate with each other relate to the level of compliance with a medicine schedule.

Second, the method step of *receiving information* is confusing, because without defining signal-producing means or signal-receiving means it is not clear to what field of technology said method step belongs, and, accordingly, how exactly said *receiving* step is implemented.

Third, use of the terms "at least a first container for storing a first medicine" and "at least a second container for storing a second medicine" is confusing, because these terms (structural elements) were not defined prior to said method step.

Furthermore, without reciting steps of taking medicine, it is not clear how exactly said *level of compliance* can be determined.

Furthermore, the first step (*receiving information*) indicates that the method step is conducted in the present tense, while the phrase "*was able to communicate* " indicates action taken in the **past tense**. It is not clear how the continuity of the method in time is preserved.

In response to the applicant's argument that Specification explains how the step of determining a level to which the party complied with a medicine schedule based on the information, the Examiner points out that claims define the invention, not Specification. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach determining a level to which the party complied with a medicine schedule based on the information, it is noted that Reber teaches: receiving information from a device that monitors whether the first container and the second container are positioned so as to communicate (C. 2, L. 66 – C. 3, L. 8; C. 6, L. 23-35). Each container for storing medicine, disclosed in Reber, is equipped with a communication circuitry, and is configured to send and receive data/information. Reber does not specifically teach that said containers communicate with each other.

Andrews was applied to show communication between two portable security devices. Furthermore, Andrews discloses the step of determining whether or not the second portable security device is within a selected proximity of the first portable security device so that communication between said first and second security devices is enabled (C. 1, C. 52-61).

Brown was applied to show means for receiving compliance data and rewarding means in a health management environment, wherein the received compliance data on individuals is evaluated, and the compliant individual is rewarded (provided with a discount) based on the status of said evaluation (column 3, lines 18-60).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

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Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Reber and Andrews relate to field of wireless communication of data between portable devices. The security feature disclosed in Andrews, would benefit a communication system dealing with health-related issues, disclosed in Reber, by indicating that a security violation has occurred if the second container is not within the selected proximity of the first container (See: Andrews; C. 1, L. 55-58). And the motivation to combine Reber in view of Andrews and Brown would be to stimulate patients to comply with health management program, thereby allowing physicians to determine the best way of treatment for the patients more accurately.

GROUP V Claims 36 and 37.

Claim Rejections - 35 USC § 112

Upon reconsideration, Claim Rejections under 35 USC § 112 in respect to claims 26-29 and 36-37 have been withdrawn.

Claim Rejections - 35 USC § 103

Claims 36 and 37 recite a computer-readable medium having instruction to implement method steps as recited in claims 34 and 35 (GROUP IV). Accordingly, reasoning provided in respect to claims 34 and 35 are equally applied for claims 36 and 37.

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GROUP VI

Claims 38.

Claim Rejections - 35 USC § 112

Upon reconsideration, Claim Rejections under 35 USC § 112 in respect to claim 38 have been withdrawn.

Claim Rejections - 35 USC § 103

Claim 38 recite an apparatus configured to implement method steps included in claim 34 (GROUP IV). Accordingly, reasoning provided in respect to claim 34 are equally applied for claim 38.

GROUP VII

Claims 39-42.

Claim Rejections - 35 USC § 101

Claims 39-42 are rejected under 35 U.S.C. 101 because the claimed method does not recite a limitation in the technological arts. The independently claimed steps of: receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine, and determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal, are abstract ideas which can be performed mentally without interaction of a physical structure.

Contrary to the claims in the **State Street; AT&T Corp; Alappat**; **Arrhythmia** cases (see analysis of this cases in reasoning for GROUP I), in the present application, the claims are completely silent with regard to technology and is purely

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an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The claims are no more than a suggested idea that somebody observes the readings of the device, and comes to a conclusion based on said observation. The claims are completely devoid of any means to carry out a process implementing the idea of "receiving a signal..." or "determining if at least one party has complied with a schedule".

Furthermore, the claims do not even recite "providing a device for monitoring..." step. There are absolutely no limitations included in the independent claim that would at least suggest use of technology for implementing "receiving" or "determining" steps, for example a data processing device, a network or any communication means. The claims do not include limitations that would suggest that a computer is being used to transform the data from one form to another that would place the invention in the technological arts. Even disregarding the fact that there is no computer claimed that would physically transform the data, there does not appear to be any physical transformation of data. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As a result, the above-cited limitation may be viewed, for example, as nothing more than simply observing a device; and coming to a conclusion based on said observation.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter.

Claim Rejections - 35 USC § 112

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In response to the applicant's argument that Claim Rejections under 35 USC § 112 (P2) is improper, the Examiner maintains that method steps recited in the independent claim are confusing and not descriptive.

First, the Applicant indicates that there are two steps in the claim, but fails to show how the steps are related with each other.

Second, the method step *receiving a signal* is confusing because it is not clear what does the term "signal" encompass: sound, color, physical action, voltage or current value, or combination thereof. Furthermore, there is not signal-receiving means are indicated, therefore it is not clear to what field of technology said method step belongs, and, accordingly, what type of signal is received, and how exactly said *receiving* step is implemented.

Furthermore, the first method step (*receiving a signal*) indicates that the method step is conducted in the present tense, while the second method step indicates action taken in the **past tense** (*was positioned*). It is not clear how the continuity of the method in time is preserved.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach the recited steps, it is noted that Reber teaches: receiving a signal from a device that monitors whether the first container and the second container are positioned so as to wirelessly communicate (C. 2, L. 66 – C. 3, L. 8; C. 6, L. 23-35). Each container for storing medicine, disclosed in Reber, is equipped with a communication circuitry, and is configured to send and receive a "signal". Reber does not specifically teach that said containers communicate with each other. Furthermore, Reber teaches determining if at least one party has complied with a schedule for taking the first

medicine and the second medicine based at least in part on the received signal (column 8, lines 55-62).

Andrews was applied to show communication between two portable security devices. Furthermore, Andrews discloses the step of determining whether or not the second portable security device is within a selected proximity of the first portable security device (C. 1, C. 52-61).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Reber and Andrews relate to field of wireless communication of data between portable devices. The security feature disclosed in Andrews, would benefit a communication system dealing with health-related issues, disclosed in Reber, by indicating that a security violation has occurred if the second container is not within the selected proximity of the first container (See: Andrews; C. 1, L. 55-58).

GROUP VIII Claims 43-47.

Claim Rejections - 35 USC § 101

In response to the applicant's argument that Claim Rejections under 35 USC § 101 is improper, the Examiner maintains that Claim 39 and claims dependent on claim 39 are rejected under 35 U.S.C. 101 because the claimed method does not recite a limitation in the technological arts. The independently claimed steps of: receiving a signal from a device that monitors whether a first container for storing a first medicine

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was positioned so as to communicate with a second container for storing a second medicine, and determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal, are abstract ideas which can be performed mentally without interaction of a physical structure.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter (See reasoning for Claim Rejections under 35 USC § 101 for Group I). Claims 43-47 depend on claim 39. Accordingly, reasoning for Claim Rejections under 35 USC § 101 applied to claim 39 are equally applicable to claims 43-47.

GROUP IX Claim 48.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach providing the at least one party with a first reward based on a distance between the first container and the second container, it is noted that Reber in view of Andrews teach: determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal (Reber column 7, line 60 - column 10, line 54), wherein said received signal being indicative of a predetermined distance between the first container and the second container (Andrews; column 1, lines 52-61). Reber in view of Andrews do not teach rewarding a party based on the compliance data, wherein rewarding comprises providing a first reward based on a distance between the first container and the second container, and

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providing a second reward based on at least one other indicator that the at least one party has complied with the schedule for taking the first medicine and the second medicine.

Brown was applied to show means for receiving compliance data and rewarding means in a health management environment, wherein the received compliance data on individuals is evaluated, and the compliant individual is rewarded (provided with a discount) based on the status of said evaluation (column 3, lines 18-60).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Reber and Andrews relate to field of wireless communication of data between portable devices. The security feature disclosed in Andrews, would benefit a communication system dealing with health-related issues, disclosed in Reber, by indicating that a security violation has occurred if the second container is not within the selected proximity of the first container (See: Andrews; C. 1, L. 55-58). And motivation to combine Reber in view of Andrews and further in view of Brown would be to stimulate patients to comply with health management program, thereby allowing physicians to determine the best way of treatment for the patients more accurately.

GROUP X

<u>Claim 49.</u>

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In response to the applicant's argument that Claim Rejections under 35 USC § 101 is improper, the Examiner maintains that Claim 39 and claims dependent on claim 39 are rejected under 35 U.S.C. 101 because the claimed method does not recite a limitation in the technological arts. The independently claimed steps of: receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine, and determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal, are abstract ideas which can be performed mentally without interaction of a physical structure.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter (See reasoning for Claim Rejections under 35 USC § 101 for Group I). Claim 49 depends on claim 39. Accordingly, reasoning for Claim Rejections under 35 USC § 101 applied to claim 39 are equally applicable to claim 49.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine, it is noted that Reber in view of Andrews teach: receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine, and determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal (See discussion above).

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Daansen was applied to show fining employees if the employees do not comply with Food Code regulations (C. 1, L. 54 – C. 2, L. 16).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the cited references deal with compliance with health-related issues. The motivation to combine Reber in view of Andrews and Daansen would be to discipline patients to comply with health management program thereby allowing physicians to determine the best way; of treatment for the patients more accurately.

GROUP XI Claim 50.

Claim Rejections - 35 USC § 101

In response to the applicant's argument that Claim Rejections under 35 USC § 101 is improper, the Examiner maintains that Claim 39 and claims dependent on claim 39 are rejected under 35 U.S.C. 101 because the claimed method does not recite a limitation in the technological arts. The independently claimed steps of: receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine, and determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal, are abstract ideas which can be performed mentally without interaction of a physical structure.

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Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter (See reasoning for Claim Rejections under 35 USC § 101 for Group I). Claim 50 depends on claim 39. Accordingly, reasoning for Claim Rejections under 35 USC § 101 applied to claim 39 are equally applicable to claim 50.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach charging the at least one party for at least a portion of a treatment of an illness, in which the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine, it is noted that Reber in view of Andrews teach: receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine, and determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal (See discussion above).

Daansen was applied to show charging employees if the employees do not comply with Food Code regulations (C. 1, L. 54 – C. 2, L. 16). As per *charging ...for at least a portion of a treatment of an illness,* it is old and well known to charge patients for medical services rendered.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the cited references deal with compliance with health-related issues. The motivation to combine Reber in view of Andrews and Daansen would be to discipline patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the patients more accurately.

GROUP XII Claim 51.

Claim Rejections - 35 USC § 101

In response to the applicant's argument that Claim Rejections under 35 USC § 101 is improper, the Examiner maintains that Claim 51 is rejected under 35 U.S.C. 101 because the claimed method for rewarding a party for complying with a medicine schedule does not recite a limitation in the technological arts. The independently claimed steps of: obtaining information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period; and rewarding the party based on the information, are abstract ideas which can be performed mentally without interaction of a physical structure.

Contrary to the claims in the **State Street; AT&T Corp; Alappat**; **Arrhythmia** cases (see analysis of this cases in reasoning for GROUP I), in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The claims are no more than a suggested idea that somebody can be benefited if he/she notices some changes in an environment. The claims are completely devoid of any means to carry out a process implementing the idea of "obtaining information…" or "rewarding the party".

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Furthermore, the claims do not even recite "providing at least one first and at least one second containers" step. There are absolutely no limitations included in the independent claim that would at least suggest use of technology for implementing "obtaining" step, for example a data processing device or any communication means. The claims do not include limitations that would suggest that a computer is being used to transform the data from one form to another that would place the invention in the technological arts. Even disregarding the fact that there is no computer claimed that would physically transform the data, there does not appear to be any physical transformation of data. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As a result, the above-cited limitation may be viewed, for example, as nothing more than simply *observing an environment;* and paying somebody based on said observation.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter.

Claim Rejections - 35 USC § 112

In response to the applicant's argument that Claim Rejections under 35 USC § 112 (P2) is improper, the Examiner stipulates that method steps recited in the independent claim are confusing and not descriptive.

First, the Applicant indicates that there are three steps in the claim, but fails to show how the steps are related with each other. For example, the relationship between

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the step of: obtaining information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period; and the step of: rewarding the party based on the information, is not clear. Specifically, it is not clear how ability of containers to communicate with each other relate to rewarding a party.

Second, the method step of *obtaining information* is confusing, because without defining information obtaining means it is not clear to what field of technology said method step belongs, and, accordingly, how exactly said *obtaining* step is implemented.

Third, use of the terms "at least a first container for storing a first medicine" and "at least a second container for storing a second medicine" is confusing, because these terms (structural elements) were not defined prior to said method step.

Furthermore, the first step (*obtaining information*) indicates that the method step is conducted in the present tense, while the phrase "was able to communicate " indicates action taken in the past tense. It is not clear how the continuity of the method in time is preserved.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach *the* recited method steps, it is noted that Reber teaches: receiving information from a device that monitors whether the first container and the second container are positioned so as to communicate (C. 2, L. 66 – C. 3, L. 8; C. 6, L. 23-35). Each container for storing medicine, disclosed in Reber, is equipped with a communication circuitry, and is configured to send and receive data/information. Reber does not specifically teach that said containers communicate with each other.

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Andrews was applied to show communication between two portable security devices. Furthermore, Andrews discloses the step of determining whether or not the second portable security device is within a selected proximity of the first portable security device so that communication between said first and second security devices is enabled (C. 1, C. 52-61).

Brown was applied to show means for receiving compliance data and rewarding means in a health management environment, wherein the received compliance data on individuals is evaluated, and the compliant individual is rewarded (provided with a discount) based on the status of said evaluation (column 3, lines 18-60).

GROUP XIII Claim 26.

Claim Rejections - 35 USC § 112

Upon reconsideration, Claim Rejections under 35 USC § 112 in respect to claim 26 have been withdrawn.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach the invention, it is noted that Reber teaches a system for medical communication apparatus, comprising: receiving the signal from a device that monitors whether the first container and the second container are positioned so as to communicate (C. 2, L. 66 – C. 3, L. 8; C. 6, L. 23-35). Each container for storing medicine, disclosed in Reber, is equipped with a communication circuitry, and is configured to send and

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receive a "signal". Reber does not specifically teach that said containers communicate with each other.

Andrews was applied to show communication between two portable security devices. Furthermore, Andrews discloses the step of determining whether or not the second portable security device is within a selected proximity of the first portable security device (C. 1, C. 52-61).

The motivation to combine the references would be to provide means for indicating that a security violation has occurred if the second container is not within the selected proximity of the first container (See: Andrews; C. 1, L. 55-58).

GROUP XIV

<u>Claim 27.</u>

Claim Rejections - 35 USC § 112

Upon reconsideration, Claim Rejections under 35 USC § 112 in respect to claim 27 have been withdrawn.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach a computer program including program code executable by the processor to determine if at least one party complied with a medicine schedule, it is noted that Brown was applied to show means for receiving compliance data and rewarding means in a health management environment, wherein the received compliance data on individuals is evaluated, and the compliant individual is rewarded (provided with a discount) based on the status of said evaluation (column 3, lines 18-60). Method

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steps disclosed in Brown are computer-implemented, thereby obviously indicating a computer program including instructions to implement said steps.

GROUP XV Claim 28.

Claim Rejections - 35 USC § 112

Upon reconsideration, Claim Rejections under 35 USC § 112 in respect to claim 28 have been withdrawn.

Claim Rejections - 35 USC § 103

In response to the applicant's argument that the prior art does not teach the sinvention, it is noted that Reber teaches: receiving means for receiving information from a device that monitors whether the first container and the second container are positioned so as to communicate (C. 2, L. 66 – C. 3, L. 8; C. 6, L. 23-35). Each container for storing medicine, disclosed in Reber, is equipped with a communication circuitry, and is configured to send and receive data/information.

Andrews was applied to show communication between two portable security devices. Furthermore, Andrews discloses means for determining whether or not the second portable security device is within a selected proximity of the first portable security device so that communication between said first and second security devices is enabled (C. 1, C. 52-61).

Brown was applied to show means for receiving compliance data and rewarding means in a health management environment, wherein the received compliance data on individuals is evaluated, and the compliant individual is rewarded

(provided with a discount) based on the status of said evaluation (column 3, lines 18-60).

GROUP XVI Claim 29.

Claim Rejections - 35 USC § 112

Upon reconsideration, Claim Rejections under 35 USC § 112 in respect to claim 29 have been withdrawn.

Claim Rejections - 35 USC § 103

invention, it is noted that Reber teaches: receiving means for receiving information from a device that monitors whether the first container and the second container are positioned so as to communicate (C. 2, L. 66 – C. 3, L. 8; C. 6, L. 23-35). Each container for storing medicine, disclosed in Reber, is equipped with a communication circuitry, and is configured to send and receive data/information. Reber does not specifically teach that said containers communicate with each other.

Andrews was applied to show communication between two portable security devices. Furthermore, Andrews discloses means for determining whether or not the second portable security device is within a selected proximity of the first portable security device so that communication between said first and second security devices is enabled (C. 1, C. 52-61).

Brown was applied to show means for receiving compliance data and rewarding means in a health management environment, wherein the received compliance data on individuals is evaluated, and the compliant individual is rewarded

(provided with a discount) based on the status of said evaluation (column 3, lines 18-60).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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